THE JACG NEWSLETTER

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THE JERSEY ATARI COMPUTER GROUP

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E D I T O R I A L

Another year gone, and the "game machine" company (ATARI), despite its detractors, and despite a great lack of "chain-store" support...still survives, and prospers. Credit to the faithful intelligent who know **GOOD** machines!!!

So...keep up the support. Support your local ATARI retailers (who, of course, should be advertising in the JACG Newsletter). Support your user-group. Ensure, by letter-writing (ugh, I know that is difficult) that their continued support of ATARI machines (of all ilk) is to their financial advantage. After all, there is a VERY large imbedded base of ATARI owners not only in the U.S., but around the world. Talk-up ATARI with your interested, but uncommitted friends.

ATARI, onward and upward. Happy Holidays!

MARK YOUR CALENDAR !!
JACG
MEETING SCHEDULE

JANUARY 9, 1987

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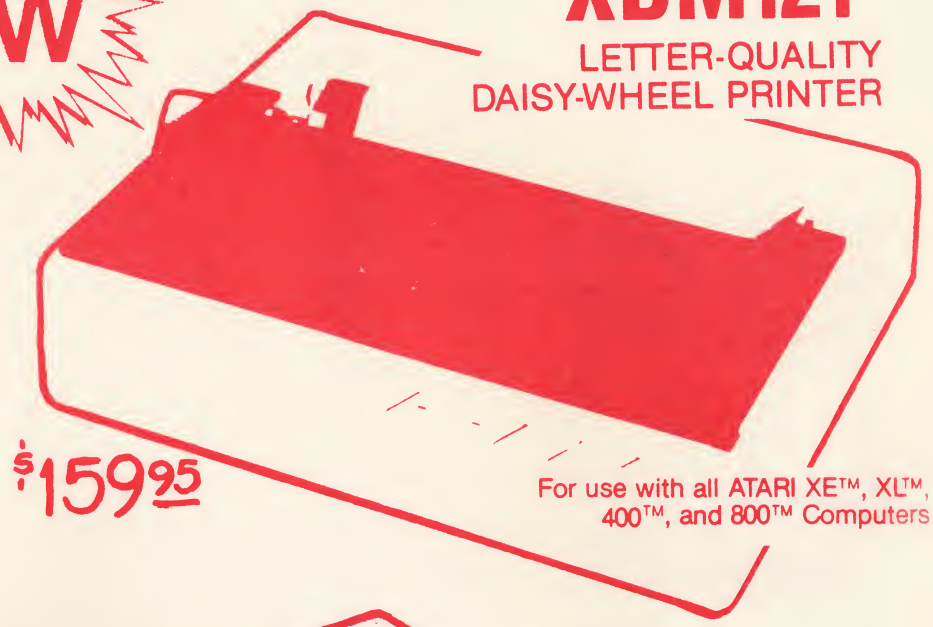

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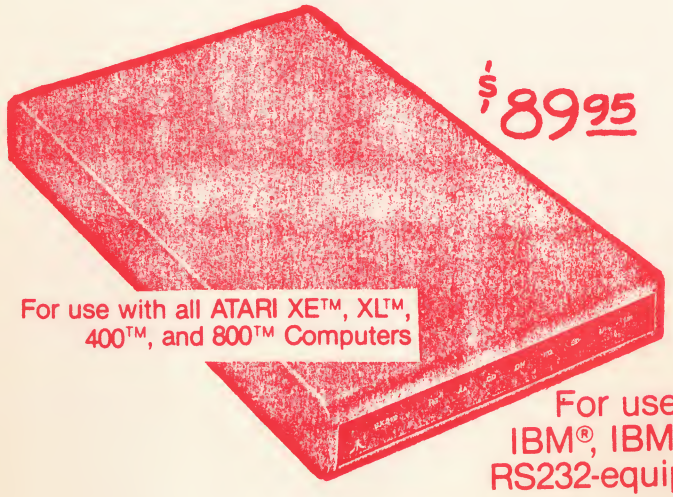

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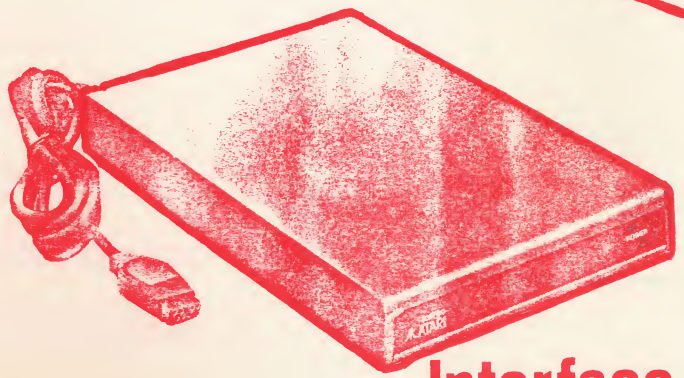

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For use with all ATARI XE™, XL™, 400™, and 800™ Computers

GEMINI ENTERPRISES

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267-0988

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was the last usable character on the medium.

SUB or substitute is used to replace an erroneous character.

The ten logical communications control characters represent the alphabet that computers use to talk to each other. These ten characters actually mark the boundaries between header, message, and error checking. Some are used as signalling codes in the transmission itself to indicate, for example, that a data block has been correctly or incorrectly received.

SOH or start of header, marks the beginning of header information.

STX or start of text marks the end of the header and the beginning of the data block.

ETX or end of text marks the end of the data (text) block.

EOT or end of transmission tells the receiver that the transmission is over.

ENQ or enquiry is the computer's way of asking "Are you there?" or "Who are you?"

DLE or data link escape is used to create control code sequences (a set of contiguous characters with a special meaning).

SYN or synchronous idle is used on direct lines to maintain clock synchronization when no data is flowing.

ETB or end of transmission block signals the end of a block of data.

ACK or acknowledge is a character transmitted by the receiver when a message is received without error.

NAK or negative acknowledge is the character transmitted by the receiver when an error is detected in a message ("I got your message but it doesn't make sense.").

So now you know how computers talk to one another. This is just one small piece of a long story. If you want to hear the rest of it (and have a C compiler for your ST) you might want to get a copy of "C Programmer's Guide to Serial Communications" by Joe Campbell (655 pages, Howard W. Sams & Co., 1987, $25).

THE PRESIDENT'S REPORT

Doug Van Hook - JACG

It is every president's privilege to name this column. The name I've selected reflects the contents of the article. I will try to describe what the officers and members of JACG have been doing during the past month. I also reserve the right to bore you occasionally with some of my opinions.

Joe Hicswa has mailed the first batch of meeting announcements. They were sent to ten Northern New Jersey newspapers with Community Service Columns. Joe is looking for additional publications. All you have to do is call Joe with the name and address of your favorite newspaper or periodical! His phone number is (201) 472-5190.

Sam Cory took the initiative to formally welcome our new Vice-Presidents by mail. Thanks Sam, sorry I didn't do that myself. Sam announced the receipt of 62 sides of 16-Bit Public Domain software from SPACE. Sam offered some helpful suggestions to Steve Godun as well.

Dave Noyes has been experimenting with the format of the newsletter. The ST Graphic Work was provided by 16-Bit V.P. Linda Peckham. Dave's next move is to try some 8-Bit software for Desktop Publishing.

Jack Rutt, our new Treasurer has already begun the process of transferring the club's checking account to a bank closer to his home. Shree Vandenberg is helping Jack until any outstanding checks have cleared.

Tom Shoosmith has loaded up the BBS with another batch of public domain software for 16-Bit users. Sysop Gary Gorski needs new 8-Bit uploads badly.

Linda Peckham has outlined plans to get together with officers of New York area Atari Groups. She would like to see an Atarifest sponsored jointly by area Atari User Groups. So far this event is in the planning stages, but we still need volunteers to help put this thing together!

I have been lobbying for a JACG Programming Contest with a CASH prize! I've organized an executive board meeting on December 4th to discuss all of the activities in this article. I know that a great deal of work was done which does not appear in this article and I apologize in advance for omitting anyone.

The news from Atari is encouraging! Atari missed the COMDEX show, but performed respectably at CES. The 65XE videogame generated the interest of mass retailers, and the new machines held their own. Atari can generate lots of excitement by releasing the T-800 and the PC Clone soon!

A USEFULL LITTLE BASIC PROGRAM

BY ERIC JACOVES

Programming in Basic is easy for the experienced programmer but still poses a problem to the novice or new computer owner. Most people buy their software and seldom consider writing their own programs. This is understandable since it takes months of effort to produce any of the titles that grace the favorite computer stores . yet there comes a time when some little thing of a sometimes tiny program would be just perfect right now but alas no one tried to sell that small application since it was just too small to be worth while. A small program to make labels with a few lines and where you could print out 1 or 3 or 24 of the same label might be one of those simple little things that no one would think of until it were needed.

I needed just such a label program and it took all of 4 minutes to whip it out but then I thought that it had uses far byond the apparent value of 26 lines of code and its original intention. And since it is indeed a simple program it might be useful to some of us(JACG members) that I explain its construction for our members that are not programmers but might be interested in trying out a few of their own creations. To that end if this article is of some small interest then I would be happy to write a series of similiar with somewhat more and less comples examples of usefull stuff for future JACG newsletters.

Here is a listing of the label program in Atari Basic.

```
10 dim a$(34),b$(34),c$(34),d$(34)
15 ? " TO INCLUDE A ,(COMMA) USE ""
AROUND THE INPUT STRING"
20 ? "Please set your labels on your printer"
30 ? "you may enter up to 4 lines"
40 ? "enter the name"
50 input a$
60 ? "goody now the address"
70 input b$
80 ? 'great now the city"
90 input c$
100 ?' super now the last line"
110 input d$
120 ? " how many labels ? "
130 input num
140 for i = 1 to num
150  lprint a$
160  lprint b$
170  lprint c$
180  lprint d$
190  lprint
200  lprint
210  next i
220? "another set ?? 1 = yes and 0 = no"
230 input  ino
240 if ino = 1 then goto 20
250 end
```

Now lets look at what each of the program statements mean.

10 this statement defines four variables as character strings of up to 34 characters each, The variables are called a,b,c and d. the dollar sign after the name says to basic Treat this variable as a string of characters and not as a number. The ?(question markin 15 is really just a shorthand way of saying the word "print" to basic so each ? in the code is really a print statement and the text that follows will be printed on the computer screen. These statements will provide information to the user and to yourself if you happen to use the program six monts later. Some people call it being user friendly but I think of it as just common sense. The statement in 15 is to alert you to a quirk in ST basic, a comma is a tab control character and if you try to enter a line for a city as "gloomp, N.J. then basic will see the comma and tab 16 spaces before printing the next character, it effectivly cancells all text after the comma. You get around the glitch by enclosing the entire response string i quotes. The print statement at line 40 directs the user to type in the name field that she wants as the first line of the label.

line 50 is the basic command that waits for the user to type in something at the keyboard and when user types a cr (carriage return) whatever was typed will become the data in Character string a$.

Lines 60, 80 and 100 are prompts to the user to type in the next three lines in the label. If nothing but a carriage return were typed in then the computer would consider the string to consist of blank characters and a blank line would appear on the label.

Lines 70, 90 and 100 are the input assignments for the next three label lines.

The program needs to know how many

labels you want printed so line 120 asks the question and line 130 puts the answer in the variable named "num"
The actual printing of the labels comes from lines 140 to 210. Line 140 starts a loop using a numeric counter variable called "i" directing "i" to vary starting with a 1 and going up to the number in the variable "num" . What happens is that the variable "i" is set to 1 and the next seven lines of the code are executed.
This part of the code contains " lprint" commands which direct the computer to print on the printer rather than the screen. The four character string variables are printed one at a time on the label. then the two empty "lprint" commands are printed on the label result in in two intended blank lines to skip to the beginning of the next label in the series. The statement in line 210 simply sets the counter variable "i" to the next higher value for the next iteration of the "for loop" in line 140, but first the for statement will check to see that the variable "i" did not exceed the value in num. If it did then the program would exit the "for loop" and procede to statement 220 which asks you if you want to do it again with another and different four lines. your answer to the question is put in the variable" ino" and ino is evaluated in statement 250. If and only if the value in ino is equal to 1 then the computer will jump back to statemant 20 which tells you to set your labels up on the printer and the whole process starts over again. If your answer to the last question is anything other than a 1 the program will stop executing and you will be done with the program at that point.

The program asks you for a Name, an Address, a City and a last line but who says that you have to listen to it?? .
Lets say that you have a Photographic darkroom and could use some labels for your photo chemicals. The name variable could just as well contain " D-76 film developer" and the address variable could contain "Date mixed" while the city variable would be " Rolls processed" and the last line would contain "1 2 3 4 5 6". Now you would have a bunch of labels for your bottles of film developer where you could check off the number of rolls of film that had already gone through the bottle of developer.
Another label could be used for the Fixer chemestry and so on.. You might wand labels for your collection of Video tapes and the name variable would contain " STAR TREK THE NEXT GENERATION"
while the address variable has the name of the episodes and their dates on the nest lines. So we see that the program really just asks you for four lines of up to 34 characters each and then produces as many labels as you want with those four lines on each label. The program does not know what those lines contain and could care less. The statements promptin you for the name and address etc are just window dressing and merely suggest for a certain kind of data relating to an address label. We know better and can turn out labels for a wide variety of things by ignoring what the program asks us for and giving it what we want, The program of course obeys us and does exactly what we want of it. It could be used to make labels for floppy disks but the four lines might be too small for the number of things on your disk, but then you could use two labels or three Hmm.
Only 26 lines of basic code that will work on an Atari ST or an Atari 800. Of course you will need a printer and form feed label stock, we can't do everything with a program.
I WOULD BE INTERESTED IN HEARING IF THIS SIMPLE PROGRAM WITH AN IN DEPTH EXPLANATION IS OF INTEREST TO OUR MEMBERS OR HAVE WE ALL PASSED BYOND THE SIMPLE CONCEPTS AND ARE WRESTLING WITH THE COMPLEX??.

```
FIXER FOR FILM
DATE MIXED   /  /
ROLLS PROCESSED
1 2 3 4 5 6 7 8 9 10 11 12 13
```

```
D-72 PAPER DEVELOPER
DATE MIXED
```

```
ASSUMPTION THEATRE
PRESENTATION OF
LI'L ABNER
NOVEMBER 1987
```

ST PUBLIC DOMAIN DISK LIBRARY

The ST disk library has grown to nearly seventy disks, not counting the SPACE disks received from that club a few weeks ago. In 1988, we'll try to make this column a regular feature of the Newsletter. Besides a description of the December disk, this column contains a list of all active disks in the Library, listed by category. Several disks (mostly from 1985/early 1986) have been withdrawn, some because the programs have been superceded (the early STWRITE disks), while others are being re-organized.

Disk of the Month

Utility Disk #3 -- This disk is a single-sided disk containing programs and accessories for disk and printer utilities. As of this writing, the disk will include the following programs:

LABELJRB.PRG -- This is a disk label maker program written in compiled GFA BASIC, from the Pittsburg ACE. It is a GEM program, and supports different label sizes, several printers including Epson FX, LQ, Gemini-10X, and the SG-10. It allows single or multiple labels to be printed out, looks for the Volume label, and can select which files (by extenders) to list.

DCOPY191.PRG -- This program is driven by the keyboard, with a non-GEM, menu display. It handles all disk functions, including 9/10 sector formatting, copying, moving, listing, and so on. It also includes the ARChive functions, and is reputed to be faster than ARC.TTP.

MEGAMATIC.PRG and CONFIG.PRG Megamatic is an auto-run program, and will, depending on the parameters set up during the Config.prg, set up a survivable ramdisk, a print-spooler, and select a desktop.inf file appropriate to the resolution desired.

F11GEM.ACC and F11GEM.PRG -- This program is a disk formatter, allowing selection of 9, 10, or 11 sectors, 80 to 83 tracks, 1 or 2 sides, and MS-DOS compatible. The ACC dialog box does not re-draw correctly, when sitting on top of windows, but otherwise seems to work well.

SHADOW.PRG -- A disk/file compressor.

CLI_02.ACC -- A command line interpreter accessory.

ST DISK LIBRARY LIST

(as of 11/28/87)

APPLICATIONS

#60* PUBLISHING PARTNER DISK #4. This disk has the Hudson and Spokane fonts, as well as Holiday clipart.

#57 STWRITER. STWriter 1.75, 2.00 (GEM), docs, ARC.TTP

#53 PUBLISHING PARTNER DISK #3. Columbia, Univ_Roman fonts, font editor docs, picture file convertors, clip art.

#51 FINANCIAL AIDES. 20 financial programs written in BASIC.

#49 PM-TO-TS. Program to convert PrintMaster icons to Typesetter format, plus several icon files.

#39 PUBLISHING PARTNER DISK #2. Demo, Helvetica, Times fonts, font editor program (mono req'd), Icon Loader for Printmaster Icons, Icon files.

#38 PUBLISHING PARTNER DISK #1. Printer Drivers.

#19 MICRO EMACS. EMACS text editor. Also, ramdisk acc and command line processor.

MUSIC

#56 SONG DISK #2. 42 Music Studio Songs

#55 SONG DISK #1. 42 Music Studio Songs

#50 MIDI MUSIC. CZVOICE, MIDI sequencer, Midisoft demo, 75 Music Studio Songs (ARC required)

#42D OXYGENE. Digitally recorded music. (1 MEG required)

#41D MATTMOOD. Digitally recorded instrumental (1 MEG required)

#40D FOREIGN AFFAIR. Digitally recorded song. (1 MEG required)

GRAPHICS

#63 STAR TREK. The Starship Enterprise flies in CAD-3D.

#62 JUGGLER. The ST version of AMIGA's Juggler.

#60* CLIP-ART DISK #3. More monochrome files, in TNY format. Also, two more PP fonts.

#59 CLIP-ART DISK #2. More

ST PD LIBRARY LIST...

monochrome files, in TNY format.

#52 CLIP-ART DISK #1. 32 Monochrome TINY format files. Can be used for Publishing Partner.

#44 AEGIS ANIMATOR DEMO. Aegis Animator player and several ARC'd sequences (ARC.TTP included)

#43D ANIMATION DISK # . BallDemo, (glass balls bouncing on a mirror), and an animated cartoon in GFA BASIC (includes run-time module). (1 MEG req'd)

#34 TINY DISK #5. 16 TINY pictures, Aintro, Grmlin, Ignit, Lizard ...

#33 TINY DISK #4. 16 TINY pictures, Aintro, Asteroid, Beer, Capitol ...

#32 TINY DISK #3. 23 TINY pictures, Betty, Bio-chip, Boeing, Dimension ...

#31 TINY DISK #2. 17 TINY pictures, nudes

#30 TINY DISK #1. 23 TINY pictures, Alice, Alien, Archon2, Bludragon ...

#28 SHINY BUBBLES. Animation from Xanth.

#24 PENTAGON. CAD-3D (1.0). Animation of a pentagon

#7 GRAPHICS DEMOS. Short demo programs displaying graphics capabilities of the ST. (1985 programs)

UTILITIES

#66 UTILITY DISK #3. DCOPY19.1, disk formatter, disk/file compressor,

#47 UTILITY DISK #2. ARC.TTP, ARC shells, addressbook, disk fixer, file hider, undeleter, sector editor, directory lister, more.

#27 UTILITY DISK #1. Accessory loader and five accessories (screen printer, disk manager, calculator fortune cookie, tinytools), file comparer, disk drive tests, file compressor, hard disk boot program.

GAMES

#46 GAME DISK #5. Megaroids, Wheel of Fortune, Blackjack, Daleks, Azarian, slotmachine

#45 PUZZLE PUZZLE. A great shareware monochrome game.

#37 GAME DISK #4. MONOPOLY, Haunted House

#36 GAME DISK #3. Checkers (acc & prg), maze of caves adv. game, Reversi.BAS, Flight Simulator situation file

#35 GAME DISK #2. Colossal Cave Adventure, Daleks, Missile Command, Nightcrawlers, Ogre, solitaire poker, Startrek.bas

#29 GAME DISK #1. Blackjack, clewso, Eliza, Joust (beta test), maze generator, mono pool game, Yahtzee, more.

LANGUAGES

#58 MARK JOHNSON'S C. A public domain C language.

#48 PD FORTH. A public domain FORTH.

#9 LOGO SAMPLER. Simple LOGO programs

#8 C SAMPLER. Simple C programs, includes source and run-time files.

EMULATORS

#54 XFORMER. The 8-bit Emulator and associated files

#26 CP/M. The Emulator for CP/M (arc'ed, includes arc.ttp)

COMMERICAL DEMOS

#67 ATHENA II. Demo version of a CAD program.

#61 EASY-DRAW. Demo version of a drawing program.

#50* MIDISOFT. MIDI Sequencer Demo (arc'ed)

#17 ZOOMRACKS I. A database using a card-rack analog. By QUICKVIEW.

#5 4X FORTH. Demo version of the FORTH language, by the DRAGON GROUP

{ Disk numbers not listed above have either been removed from the library, or are in process of being re-organized and updated. * indicates that the disk is listed twice. D indicates that the disk is double-sided, and that one megabyte of memory is probably required. The underlined disks have been introduced since November 1.}

Circuit Maker

A logic simulator for the
Atari ST

Paul Machiaverna - JACG

Working in the field of electronics and computers has made me wish for circuit simulators on my Atari ST for a long time. The subject of circuit simulation is a very interesting feat for a computer. It replaces the use of the breadboard for testing of a circuit. Think of the computer's screen as an electronic breadboard where you construct a circuit with components available from the library of devices and draw lines which represent the physical wires used in actual breadboarding. If any modifications need to be made, you simply change the arrangement of the components or 'wires' and test it again. Programs such as these have been available on the IBM and Apple microcomputers, as well as many minicomputers and mainframes, for some time now. But, recently my wish came true. Iliad software is the publisher of the Circuit Maker program written by Ozzie Boeshans for the Atari ST computers.

First, let's talk about the system requirements for using Circuit Maker. You can use any ST with TOS in ROM, at least 512K RAM, a color or monochrome monitor, any disk drive (floppy or hard drive), and it is also a good idea to have a Epson or compatible printer for a hardcopy of your final circuit. It is assumed that you know how to use your ST system and it's GEM interface. However, it is not assumed that you know the theory behind digital electronics. A very good tutorial is included in the user manual intended to teach anyone about digital electronic and how to use Circuit Maker effectively. The tutorial tells you the theory of a given circuit and then has you to construct it. Simple quizzes are provided to test what you have learned.

Starting to use Circuit Maker is very easy. I only had to read three short pages of the manual to start using the program. In minutes I had a digital circuit wired up and running on the screen. When building a circuit on a real breadboard it can take hours. That is certainly not true with this program. I didn't have to worry about cutting all those wires to length and stripping off the insulation. I didn't have to worry about running out to the store to buy all the needed components. And finally, I didn't have to worry about burning out any components because I made a mistake in my wiring. Now I can build and test an entire circuit within minutes on the screen and make modifications within seconds. That is what a computer application should do; enable you to do something easier and faster on the computer than possible by conventional means.

Circuit Maker makes use of GEM. While I am not a very big fan of the GEM interface, I feel that the author of this program has made very good use of it. You can perform most of all the functions available in the program with the mouse. The only times you need to use the keyboard is when you label your circuit diagram or type in a filename for disk access. It truly allows you to simply point & click to construct any digital circuit. Modifications to a circuit are easily performed by pointing and clicking on the component you want to move or delete. When you click on the component it will change into a ghost image, like you see when you use GEM for file copying on the desktop. You may then move it to any location on the screen and click again to place it in the new location. Wiring is easily accomplished by choosing the 'Wire' option from the pull down menu. Then you point to the pin of any component on the screen and click. This will anchor that connection. Move the mouse over to where that connection is to terminate and click again. There is also an artificial intelligence routine used here. Even of you don't point exactly on the desired pin, Circuit Maker will automatically make the connection to the nearest one. Also, all lines can only be drawn vertically or horizontal, so you don't have to worry about sloppy diagonal lines on your circuit.

Other very important features include programmable pulsers and simulated oscilloscopes. The programmable pulsers are simulated square wave generators for which you have control over the frequency and the duty cycle. There are a total of four simulated oscilloscopes which allow you to observe the waveforms present at any point(s) in the circuit you select. The waveforms appear on the screen in a GEM window. This is a very valuable tool for tracing the data pulses in your circuit. The pulse trains observed on the oscilloscopes can be printed on your printer along with the circuit design. The print quality is very good and professional looking.

I know that an all positive review like this one for any program is open to apprehension by the reader. You yourself are probably asking, 'Is Circuit Maker that good?' My answer? YES! The only problem I had with this program was that the original version only allowed circuits created on the color monitor to be loaded on the color monitor and vice versa for the monochrome monitor. However, version 1.2 corrects this problem. Note that this program is for use only with Digital electronic circuits. To the best of my knowledge there are no Analog electronic circuit simulators available for the ST.

As a further note of how good this program compares to other simulators, a friend of mine tried Circuit Maker and completed his first circuit in less than five minutes. In that short time he had built and tested his design.

His reply was, 'This program is far more powerful and easy to use than the one I use on the mainframe at work!' He works for ITT...

With Christmas right around the corner I suggest that you put this program on your list for Santa. Whether you are an experienced Digital electronics engineer or someone who wants to learn about this fascinating field, Circuit Maker is an excellent choice for circuit simulation. If you have any questions leave me E-Mail on the JACG BBS and I'll be happy to help you.

NOISE FROM NOYES

D. B. Noyes - JACG

Have hearts, faint lassies and laddies; I stopped by GEMINI to pick up the "ad" copy for this issue...and guess what? They still carry a TREMENDOUS amount of 8-bit software, including recent releases. I think it proper to put to rest the RUMOR of GEMINI's impending dropping of 8-bit support! As usual, the "bargain basket" was again the cause of the separation of a few dollars from my wallet.

In the RUMOR category, and I do stress "RUMOR" - what the heck is going on with ANALOG magazine? First issues began appearing late (disk issues even later), then the July/August issue was doubled up. It is now December and the last issue received was October. I hear (RUMOR) that the November/December months will again be doubled-up. So ar, if this is true, the last issue of my current subscription, will now be April instead of February. Again (RUMOR), I have heard that ANALOG took a considerable loss on their ST LOG, and an un- or under-paid printer held back on the product. After having been "burned" by HOME COMPUTER MAGAZINE, I am holding off on the renewal of my ANALOG subscription. If ANALOG is in imminent danger of collapse (which I fervently hope is not the case); such an event would be a considerable loss to the ATARI world. I personally have always rated it a "cut above" ANTIC.

Speaking of ANTIC, I have discovered a "gem" of an application program in their November, 1987 issue. Entitled "WYSIWYG", the program allows one to produce audio cassette jackets using a variety of fonts. As my scrawl is, at best, barely legible, sanity may actually come to my cassette collection!

Have happy and safe holidays...see you next year!

A NEW COMPUTER SHOW IN TOWN

Neil Van Oost Jr. - JACG

Early in November I received a flyer for The Cherry Hill Computer Swap. It was held at the Garden State Race Track on 21 Nov. The show was put on by RK Productions, Inc. The name is well known for computer shows on the west coast and this was their first in our area. Admission was $5.00 at the door.

I arrived at the show an hour and a half before the scheduled 10 AM opening time expecting large crowds. What I found was a group of four wandering around, looking for the entrance. After finally being directed to the proper entrance, we waited inside out of the freezing wind, and talked to the security guard.

We were allowed entrance at exactly 10 AM, by now a crowd of about 100 had gathered. It was nice for a change not to have the usual entrance stampede. The show area was large, with lots of space in the aisles and well lighted.

Although I found only one dealer with a couple of 8 bit pieces of software, there were several with some ST stuff. Mostly it was all 'IBM' and clone dealers. I did manage to find a couple of bargains tho. I bought two printer stands for $5.00 each -- the dust on them was cheerfully thrown in for free. They were exactly what I had been looking for, and at the right price, 'So who can complain about a little dust'.

My second buy was also an item I was looking for, colored ribbons for my NX-10. I purchased these from the RIBBONLAND of Exton, PA, table. The show price on four ribbons was a reasonable $23 and change, so I walked away from their table happy. If you read my review on the Inkfinity (tm) Ribbon Kit last month, you know I just had to send off a check for some color kits.

The last purchase I made - well actually two - was some white mailing labels. I paid $5.00 for 1000, turned around to check out the aisle behind me and found another dealer selling them for $3.50 for 1000. Since this was such a better deal, I bought 2000 more, for an average cost of $4.00/1000 -- Oh Well! -- (heavy sigh).

When I left the show around noon, the crowds had increased considerably, with buyers two deep at the more popular tables. RK Productions has a show a month scheduled through April at either Garden State Race Track or Philadelphia Park Race Track. Information for these shows can be had by dialing the following toll free number; 800-722-7927.

GAUNTLET

For Atari XL/XE Computers

Mindscape, Inc.
3444 Dundee Road
Northbrook, IL 60062
(312)480-7667
LIST PRICE: $35.00

Steve Godun - JACG

The last Mindscape product I reviewed was Bop'N Wrestle a few months ago. Very little was good about that game, and, needless to say, it spawned about as much interest in me as a turnip. Gauntlet for the XL/XE computers brings slightly more enthusiasm than Bop'N Wrestle did. Slightly.

First, my philosophy on arcade-to-home translations: If it can't be done well, don't do it. If it takes a year to create the program, so be it. But just make sure that the final program is as close to arcade realism as possible. With this in mind, we're off.

The main thing wrong with Gauntlet is that it looks, well, unfinished. It's as if the programmers were sitting in front of their Atari programming away, when suddenly the disk was ripped from the drive, packaged up, and shipped out. For a true-to-the-heart Gauntlet player (for those of you who don't know, Gauntlet is a very popular arcade machine right now), the XL/XE version simply doesn't cut it.

But first things first. Let's start from the outside and work our way in. The packaging, although appealing, is slightly misleading. The album-like folder shows photos of the Atari ST version and the Commodore 64 version (on an Atari product???), both of which are graphically appealing. So you'd figure, "well, if the C-64 version looks THAT good, how different could it be from the Atari version?" Ha! Guess what? Buy this disk on account of these assumptions and you'll find yourself short $35.

OK...Unwrap the plastic, open it up, and out slides a double sided disk and the thin manual. A cursory glance at the manual confirms my suspicions -- just enough information to get you going. Period. No more. It's up to you and you've only got one life to live, so make it count. But since I'm a veteran of the arcade quarter-gobbler, I have little need of instructions. So...Boot up the disk.

Tah-dah! Amazing! An incredible picture of two Gauntlet warriors with weapons beared and "Gauntlet" depicted in Atari rainbow scrolling colors. So far, so good. Wait a few seconds...OK, the credits roll up, then it tells you how to choose a character. Excellent! You now control a glove (a gauntlet, actually) that allows you to choose the number of players and what character each will depict (there are four to choose from; Merlin the wizard, Questor the elf, Thor the warrior, and Thyra the female valkyrie). OK...I choose Merlin. Now, flip the disk over and press fire. No sweat.

Well, that's the end of the great graphics. Merlin, once depicted with mystical eyes in the midst if casting a spell has become a nearly shapeless blob on a dull, drab, and detail-less maze. The once highly detailed potions, monster generators, keys, and treasure chests have become colored specks that seem to be programming bugs at first glance. Kind of reminds me of Atari GRAPHICS 3 with a few redefined characters. Is someone going to compile this?

Needless to say, I was more than disappointed with XL/XE Gauntlet. After understanding my philosophy on arcade-to-home translations you can see why. The ST version, shown at a past JACG meeting, is very nicely done and I hope to have it in my hot little hands by the time the next newsletter rolls around. If I succeed, you'll be sure to see a review here.

I suppose I should be happy that there are still some software houses that support the XL/XE computers. Maybe I'm just asking too much...Like graphics, sound, or maybe something as drastically difficult as P/M graphics. On the other hand, maybe I'd be better off saving my money and just buying my software from Gemini's Bargain Bin. Oh well...Until next month, Atarians...

UPCOMING COMPUTER SHOWS

Neil Van Oost, Jr. - JACG

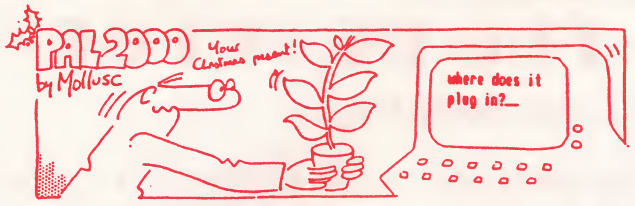
December
- 19 Sat. KGP Wm. Paterson College, Wayne, NJ
- 19 Sat. PACS LaSall Univ., Phil. PA
- 27 Sun. BB Holiday Inn, Suffern NY

January
- 03 Sun. KG Geo. Wash. Conf. Ctr., Willow Grove PA
- 16 Sat. PACS LaSalle Univ., Phil. PA
- 23 Sat. KG Royal Plaza Trade Ctr. Marlboro, MA
- 30 Sat. RK Garden State Race Track, Cherry Hill NJ
- 30 Sat. KG Sheraton Hotel, Carrolton, MD

February
- 06 Sat. KG Wm Patterson College, Wayne NJ
- 20 Sat. RK Phil. Park Race Track, Bensalem PA
- 20 Sat. PACS La Salle Univ. Phil. PA
- 27 Sat. KG Northeast Trade Cent. Woburn, MA

RK Productions 800-722-7927
KG Productions 800-631-0062
BB Tri State Computer Fairs 201-533-1991

Above information supplied on a hand out from Applied Resources (computer books), Horsham, PA



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LILLIPUT VERSUS BROBDINGNAG

Donald Forbes - JACG

Will the PCs take over the world?

In Victorian days politicians fretted over the "yellow peril," fearing that the Orientals, by sheer numbers, would overrun the world.

The PCs, by sheer numbers, this year will account for 97 per cent of U.S. shipments of micros, minis and mainframes. Out of an estimated 4 million units, PCs will represent 3.9 million, with 94 thousand for minis, and 11 thousand for mainframes (Datamation, Sep 15, p 78).

SHIPMENTS

	Total	Mainf	Minis	Micros
1957	700	700	0	0
1970	8,320	5,700	2,620	0
1980	301,850	8,840	41,450	250,500
1987	4,021,200	10,688	94,852	3,917,000

PCs this year will account for 40 per cent of the $26 billion of micros, minis and mainframes sold in the U.S. (with mainframes taking 40 per cent and minis 20 per cent). The total has doubled (in constant 1986 dollars) from the 1980 U.S total of $13 billion.

U.S CONSUMPTION
Millions of 1986 dollars

	Total $	Mainf %	Minis %	Micros %
1957	252	100	0	0
1970	3,810	94	6	0
1980	13,431	66	19	15
1987	26,743	40	40	20

The numbers seem to indicate that the micros are about to drive the mainframes to the wall. But we may be jumping to conclusions.

Here are some thoughts from a veteran observer of the computer scene, Mike Edelhart, who wrote the following in a recent column for PC Week magazine:

"There are thousands of micros in many corporations that, as a group, can simultaneously support many users, as mainframes have done for years.

"There is, however, a great danger in taking this supposed trend too seriously. The truth is that, whatever the level of power micros attain, they will never become mainframes. The differences between the two computer types goes far beyond the mere ability to process MIPS (millions of instructions per second).

"The image that comes to mind is of airports and planes. Airports are large, fixed structures designed to allow thousands of unrelated bits of humanity to interrelate briefly, be routed and go on their merry ways. As airline travel has grown more complex, so have airports; they can now process more people faster than ever.

"At the same time, airplanes, the vehicles that actually serve the users of the travel business, have also grown in number, speed and complexity. Today, airplanes can carry as many as 500 people, sometimes at supersonic speeds.

"But no matter how much better airplanes become, it would be ridiculous to propose that an airplane could ever supplant or become an airport. Their roles are separate.

"So it is with mainframes and PCs. Mainframes are the termini of information systems--the large fixed structures where data from many sources can intermingle, be stored and routed to their ultimate destination. PCs are more like planes, a means of getting the user or a defined group of users where they want to go. An effective system requires both elements, and neither can ever effectively replace the other.

"My concern about the ubiquity of the PC-swallows-mainframe myth is that it may cause some connectivity planners to undervalue the ability of existing or future mainframe resources to help accomplish their business goals.

"The role of mainframes is certainly changing; they aren't the be-all and end-all of corporate computing they once were; other resources can now claim vital roles.

"But the mainframe isn't about to go away. Large systems need large way stations, and mainframes will fill that role in connectivity environments for many years to come."

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FROM THE DESKTOP

by Linda Peckham

Welcome to the last column of 1987! As we close out the year 1987, the big question is which promised desktop packages will actually be found in the stores, and which ones will evaporate into the never-never land of vaporware. And who among us DPers (other than those already rich enough to afford one), does not wish that Santa Claus would leave a laser printer under the Christmas tree? (Or a 4 megabyte upgrade kit ... or a MEGA-ST4 ....)

The ABAQ transputer may have been the star attraction in the Atari booth at Comdex, but for DPers, there were much more interesting (or at least more immediate and affordable) things to check out. From the reports I've read, several companies were showing off Desktop Publishing packages for the ST and/or Mega. If all these companies actually get their programs to market, by this time next year, the ST users should begin to have as wide a selection as the paint and music areas enjoy now. The programs that were either being shown at Comdex, or which have been mentioned on GEnie, are as follows:

DESKTOP -- This was the program being shown at the Atari booth, with different sources saying availability either 1st or 4th quarter of 1988. DESKTOP is apparently being transferred from the $2000 IBM PC world, and will provide compatibility with one of the non-Postscript typesetting manufacturers. It will, of course, support the Atari laser printer, but will require a MEGA ST4 to run! Fonts will be $50 apiece, for one style (roman, boldface, italic, boldface--italic). Definitely not for the casual user.

CRYSTAL and ***LEX(ET)*** -- These programs have been mentioned in the general desktop publishing topic on GEnie. These are programs that will be running under IDRIS, the UNIX-workalike operating system that will be available for the ST. CRYSTAL is apparently a set of programs to go from entering text, to the final output.

CALAMUS -- Readers of START will discover the first ad for this program on page 55 of the Winter 87 issue. This program was at Comdex, and is slated for appearance during the first quarter of 1987. The price will be $350, and require a MEGA (or, presumably, an upgraded ST). If the program lives up to the ad hype, and the details shown at Comdex, this could possibly be the program for power users. The ad listed as features full word-processing with spell-checker (in a separate window), and object- and pixel-drawing functions built in, as well as the standard desktop functions. The ad also implies an ability to handle "one to hundreds of pages." Output may support Postscript, DDL, Interpress, the Atari printer, HP Laser Jet, and so on. It should be noted, that the program was not finished, as of Comdex, and the ad caveats that the features described could change. The program is apparently from Germany, and will be marketed by ISD Incorporated in Ontario -- the same company that markets the VIP spreadsheet.

PUBLISHING PARTNER PROFESSIONAL -- Or, 2.0, depending on how you want to call it. SoftLogik was at Comdex, showing off all of the next features -- auto text-flow, auto-kerning, etc, etc. The program is apparently in beta test at the moment, and should be out early next year. List price currently is set at $150, same as the current version. There seems to be some uncertainty as to the upgrade price -- one message (later than the one mentioned last month), says the upgrade will be $50.

GFA PUBLISHER -- Michtron will be bringing this one out -- that's about all I know at this stage, other than

it will use GDOS for the output. The GFA PUBLISHER topic on GEnie hasn't had any new messages since September, and it's not currently a topic on the Michtron roundtable bulletin board.

TIMEWORKS DESKTOP PUBLISHER -- In October ANTIC, Timeworks advertised this package, with a release date of December. One might guess that it ought to have import text compatibility with Word Writer, though it doesn't say. The advertisement didn't mention anything out of the ordinary, and it would appear to be aimed at the short-document side of the market.

Which of these packages will actually see the light of day? And more importantly, which ones will be worth buying? Almost certainly, Publishing Partner 2.0 will show up (they'll have an awful lot of angry users, if they don't), and Michtron and Timeworks are pretty good about getting their promised software out. At a guess, Michtron and Timeworks will be battling for the ease of-use, to be used by those with casual uses, or short documents. CALAMUS -- if and when -- could be a program for serious DPers, if it lives up to the hype. Let's hope it does -- Atari needs a software package that can handle long documents and support Postscript. And I'd certainly like to take a look at this one (after my 520 gets another memory upgrade.)

THE REST OF THE FONTS

With the font limitation on 1.01/1.02, I couldn't display all of the fonts on the Font Factory disks last month. Here's the rest -- except for Disk 3, which I haven't found yet. Font Factory is planning on more fonts -- and is willing to consider fonts done outside their group, if they're good enough.

PALATINO–ABCDEFGHIJ
KMNOPQRSTUVWXYZ
abcdefghikjlmnopqrstuvwx
yz1234567890!@#$%^&*()-
_=+'~[]{}"\|,./?<>

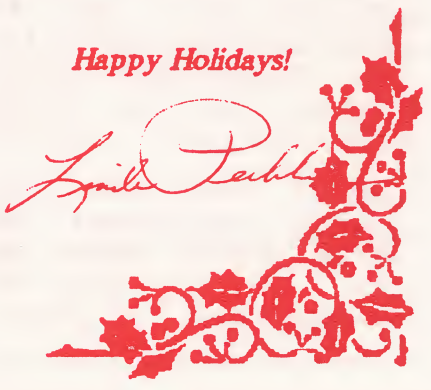
8 - B I T - -
ABCDEFGH IJKMN
OPQRSTUVWXYZ
abcdefghikjlmnop
qrstuvwxyz123456
7890!@#$%^&*()-_
=+[]{}'"\|,./?
<>

Further Adventures in IMG Scanning

The demonstration of the IMG Scanner at the November used version 1.4 of the software. Recently, I downloaded version 1.7 from GEnie. The main difference is that one program is used for both monochrome and color monitors. The main screen is virtually the same as shown last month. The routines converting the incoming data to screen data have been moved around, to decrease the scan time. And, besides the program itself, several data files were included, for different printers. Unfortunately, none of the files were for 24-pin printers. The drawback of the scanner remains, with the importance of getting the ends of the optic fibers the right distance from the page, and the necessity of using a xerox copy of a picture, or at least a very matte and dark black for line art.

Once you start getting decent scans, line art tends to have very fuzzy edges. One of the good things about IMG Scanner is that support software is developing for it. One program I just downloaded, and haven't had a chance to look at yet, uses some algorithms to try and smooth the edges of line art. Hopefully, I'll have a chance to look at that one, over Christmas vacation.

Happy Holidays!



FROM JAY'S PERCH

by Jay Abrams

"ATARI FLOODS COMDEX WITH PRODUCTS"
-INFOWORLD

In case you've forgotten, two years ago INFOWORLD, the most prominent Micro weekly, said in an editorial they would no longer be covering no-account unimportant companies, Atari being the prime example. Well, this year Atari became coverable again. On to the flood...

On the hardware side Atari showed Abaq, the 32 bit parallel processing workstation I discussed in my last column. Three MS-DOS clones were announced: an XT, AT and a 386 machine. Sam Tramiel confirmed that Atari was working on 68020 and '30 machines and intended to bring them to market in 1988.

The (very) long promised CD-ROM showed up and a medium performance Local Area Network, called Moses PromiseLAN (no kidding!) also appeared. The Mega ST machines had debued at CES in January but COMDEX was the first big opportunity for American dealers, VARs (value added resellers) and major end users to see the machines and their chief raison d'etre: the laser printer.

And there was the software. As is the custom, third party vendors took over much of the booth, but this time Atari had much to show as well. While Atari is not a big software producer, the programs it choses to market can be quite important to its future plans. For example, Atari endorsed IDRIS, a DEC/IBM port as its multiuser, multitasking operating system for the ST and Mega lines. It is very likely that the 68020/30 machines will use this operating system.

IDRIS does not require special memory management hardware which would allow many applications to run on all the 680x0 machines irrespective of their vintage and would expedite development of new software in anticipation of the next generation of machines.

For Atari, Comdex was its debut as a business computer firm.The company chose to follow three parallel routes: to build clones for the close minded, to go after desktop publishing with a real Mac eater and to go way beyond the usual definition of even a workstation with a machine calculated to intrigue Techies with access to that magic ingredient: Other Peoples' Money.

As clones go the Atari machines are pretty good. The PC1 had an impressive amber monitor running under EGA (in fact its display resolution was better than the ST in monochrome). PC2 (the XT clone) has four slots, the PC1 graphic features and a choice of 3.5 and 5.25 drives. The AT clone (PC4) goes one better offering VGA resolution, plus 5 AT expansion slots and a super fast hard disk controller. The PC5 is a 16MHz 386 machine.

The real hub of Atari's business strategy is the Mega computer. Everything plugs into the Mega: the ABAQ work station, the CD-ROM (which also stacks under the Mega as does the new line of hard disks), the laser printer and the local area network. The PCs hook up to it in the network and with the new 3.25 standard, the ST's little known MS-DOS file compatibility can be a real business asset.

The Mega is a very attractive and powerful business machine. In fact, ST users tend to forget just how powerful the machine actually is. Running the BYTE Basic sieve and calculation benchmarks the mega, running True Basic actually outperformed the Compaq 386 and IBM model 80 both 32 bit machines running at 16 MHz. On the spreadsheet recalculate benchmark the Mega was faster than the Model 80 and only .6 seconds behind the Compaq. My point is not that the

Mega is better than the new 386 machines (this kind of issue can't be handled in brief) but it is comparable to the latest Intel generation and a defendable choice for business users.

With a hard disk and laser printer the Mega is one of the lowest cost document processors on the market. The system I saw in Washinton worked fine and made excellent copy. That the Mega is aimed at a specific market niche is reinforced by the software introduced or endorsed by Atari at Comdex. IDRIS came over with six market ready programs, five of which are wordprocessing or desktop publishing software. Atari will market its own publishing package called Deskset from G.O. Graphics. This typesetting program was ported from the MS-DOS world and is much more expensive (and powerful) than Publishing Partner. were high end word processing or desktop publishing. With all this new software, Atari is concentrating its effort into a particular segment rather than scattering its resources.

Like the ST, the Mega mostly "expands" through it's ports. There are however two internal expansion options. In the UK prototype, the memory chips were socketed not soldered to the board allowing memory to be upgraded to sixteen megabytes by replacing the megabit chips with four megabit ones, assuming the pinout are compatible.

More conventionally, a second internal board can be installed with direct access to the bus or to a second internal DMA port. According to Neal Harris, Atari is not likely to build a "card cage" for future expansion of this machine and the SH205 despite being a large box, doesn't contain anything other than disk drive hardware.

Plugging into the Mega DMA port is an entirely different sort of computer, the ABAQ. ABAQ uses the Mega4 as its front end which means that the Mega controls input, output to printers and local area networks and probably controls the disk drives.

The ABAQ itself has as much power as many current mainframes. Fully configured the computer can execute 19 million floating point operations per second or over 100 million instructions. Needless to say, it sits on someone's desktop.

ABAQ supports four graphic modes:
1280x960 in 16 colors or monochrome, 1024x768 in 256 colors, 640x480 in 256 colors with two screens and 512x480 with 16 million available colors plus overlay.

This system has flexiblity as well as power. The HELIOS operating system allows the user to take full advantage of a multiprocessor architecture.
Helios is designed to mimic other enviornments allowing foreign operating systems to run as applications. Given the power of the system, ABAQ would have no difficulty running MS-DOS applications as fast as a 386 (or the 80486 when it comes around for that matter).

Things get interesting when the machine stops operating like a traditional computer. For example it would be possible for each microprocessor to dedicate itself to a specific task, each task running at 10 MIPS each. Because the Transputers making up ABAQ were designed from the start for communication each of these independent tasks could talk to the other while running at full speed. Or the processors could form a bucket brigade (also known as a pipe) each processor doing one step or subroutine and passing the result down the line of microprocessors. Or true parallelism: each processor works on the same function or subroutine but uses different data.

For Atari, ABAQ is the third entrance into the business world, in this case into engineering departments and academic labs. I estimate the cost of a basic system including its Mega 4 front end and a hard disk to be in the $8500 range.

This leaves ample room for the 68020/30 machines which will have some of the display capabilities of the ABAQ if not its computational power. 1988 promises to be an interesting year.
Sources for this article include the Atari Corporation, Infoworld, Personal Computer World, and Neil Harris.

MEGA ST

The Mega STS have arrived

Paul Machiaverna - JACG

Finally, after waiting for over six months for the Mega ST computers, they have arrived. I recently purchased a Mega ST4 and this article discusses what the machine really is from a users point of view. Frankly, with all the rumors which were spread around about the Mega STs I did not even believe what I was reading in the commercial magazines anymore. So, I present you with the facts and not fiction about the newest computers in the Atari domain.

The Mega is an refinement of the existing ST computers. The operating system (TOS) has been updated to make it compatible with the long awaited Blitter Chip. The Blitter Chip is a data movement device which allows the screen displays to update and scroll much faster than ever before. Therefore, you instantly notice the faster response of GEM. The windows open faster and the data scrolls much smoother. Because the Atari ST is such a graphics oriented machine, it is only natural that any user will welcome the advantages listed above. You also have the option of turning the Blitter Chip off from the desktop if you find that a particular program runs too fast or not at all. Even with the Blitter disabled, the Mega runs a lot of software faster. Also, because of the newer TOS, floppy disk access has been increased by 30% and I can truly say that I notice the decrease in reading and writing time.

A big matter of concern to many potential buyers is the fact that certain software will not work on the Mega. I do have a few programs which will not run on my Mega. However, I have called the software vendors who have produced such programs and they have fixes for this incompatibility. I surely do not put the blame for this on Atari. It is not Atari's fault that stubborn programmers do not follow the rules supplied for writing commercial software on the ST computers. What we are seeing here is exactly what happened when Atari went from the 400/800 operating system to the XL/XE operating system. Programs which made illegal calls to specific locations in the older operating system would not run on the XL/XE computers. Remember that Atari made it perfectly clear that certain locations would not change and other could in the future when the first memory map was made available. So, do you really blame Atari for software that does not run when it is the programmer's fault in the first place? Not me! When I called Optimized Systems Software (OSS) about the editor in Personal Pascal Version 2 not working on the Mega, the technical department told me that all I had to do was send in my disks and a small shipping charge for an update to the editor for it to work. And, they took full blame for the editor not working. Now that is what I call a terrific company policy. But, any OSS product user knows that they have been the finest Atari supporters for a long time and they have one of the best technical support staffs.

Other nice features of the Mega is a detachable keyboard, a built in fan, and an internal clock/calendar chip. The detachable keyboard can be placed in the typing position you like. No longer do you have to adapt yourself to you desk just to get at the keyboard. Plus, the feel of the keyboard has been greatly improved. The 520ST and 1040ST have keyboard which feel like you are typing on a sponge. The Mega keyboard, however, has a much better key travel and positive feel when you type. The internal clock/calendar chip uses two double A size batteries which are easily installed from the top of the CPU. You do not need any special programs in an AUTO folder to read the time from the chip. When you set the time and date from the control panel the chip is automatically updated and will automatically set the system time upon boot up from any disk. The built in fan keeps the machine running cool. Unlike the 1040s and 520FM models which have been known to get quite warm, the Mega does not.

As you can probably guess I am very pleased with the Mega ST. I know that the prices are steep, but I use the machine for work purposes and the cost was well justified for the improved performance. The only thing that I wish was different was that the mouse and joystick ports were on the CPU instead of the keyboard. I find it ironic to have a detachable keyboard with a mouse hanging off of it. The mouse tends to be an annoyance here. But, aside from that I really like the machine and wish Atari much success with it. Again, Atari has presented the public with a real powerhouse and serious competitor to the microcomputer market.

PDG

Steve Godun - JACG

In my first PDG write-up, I have the good fortune to examine two excellent terminal programs: Amodem 7.50 by Trent Dudley, and Kermit 850 by John Palevich and Jim Dahlberg. Many of you are already quite familliar with Amodem, but Kermit is a relatively unknown program. It is a file transfer protocol that is more commonly used among IBM PC's to transfer files. It is very efficient, and yes, it was named after everyone's favorite frog.

I must say that I am (or rather, was) a dedicated 850 Express! user up until I received this disk. Amodem 7.50 is perfect for almost all of my needs! I honestly didn't think that Express could be matched, let alone surpassed in communications convenience. Now my Express disk sits right BEHIND my Amodem 7.50 disk. Maybe some day I'll use it again...

So without further adiou...JACG Disk of the Month #132D.

CONTENTS - Side 1 (Amodem 7.50)

1) DOS.SYS - Standard Atari DOS 2.5.

2) AM750PT1.DOC/AM750PT2.DOC - Documentation files for Amodem 7.50. The text is completely unformatted, so a word processor comes in handy here. This tells everything from making a bootable disk to Ymodem Batch downloading.

3) AMODEM75.BAS - Main Amodem 7.50 program, written in Atari BASIC. This version (the latest version) has fixed all previous bugs and has all the features of previous Amodem programs, plus support for Ymodem and Ymodem Batch uploading and downloading.

4) AMODEM75.COM - Machine Language subroutines used by AMODEM75.BAS.

5) AMODEM75.HLP - Help screen for AMODEM75.BAS.

6) AUTGEN75.BAS - Phone list creator for Amodem 7.50.

7) AUTOBOOT.COM - To be appended to the handler of the desired modem. Gives choice of phone list maker or Amodem 7.50 on bootup.

8) BOOT850.COM - Atari 850/PR Connection handler.

9) BOOT1030.COM - Allows use of the Atari 1030's built-in handler instead of the supplied handler (saves buffer space).

10) MPPHNDLR.COM - MPP/Supra modem handler.

11) RHANDLER.COM - "Universal" handler; Defines itself upon bootup.

12) THANDLER.COM - Handler for Atari 835, 1030, and XM301 modems. It takes up about 1K of buffer space, but allows use of Amodem 7.50 with SpartaDOS.

13) READ.ME - Describes files needed to update Amodem 7.4 disk.

CONTENTS - Side 2 (Kermit 850)

1) DOS.SYS/DUP.SYS - Standard, plain vanilla Atari DOS 2.0S.

2) AUTORUN.SYS - 850/PR Connection handler appended to KERMIT.EXE (see below).

3) KERMIT.PNS - Auto-Dial phone list for Kermit 850.

4) KERMIT.OPT - User-definable parameters (baud rate, parity, etc).

5) KERMIT.DOC - Documentation for Kermit 850. Preformatted to 80 column printers; Just copy from disk to printer.

6) KERMIT.EXE - Main program (backup file).

Remember, this is Disk #132D. You can pick it up for $3 this month ($4 by mail) at Sam Cory's table before and after every meeting. Mail orders should be sent to:

JACG MAIL ORDER LIBRARIAN
Bret Callegari
306 Division Street, Floor 2
Boonton, NJ 07005

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Atari Fair

Joe Kennedy - JACG

Dateline - Duesseldorf 9-19-87

Yes, it's a report direct from the fair. Well, direct in the sense that I came directly home after the fair and I am writing a report on it. The details are simple. Rather than having user's groups stage Atari Fairs as they do in the States, Atari has directly sponsored a fair at the International Fair grounds in Duesseldorf. This may be due to the fact that the Atari ST seems to be given much more respect here in Germany as a top notch computer for

fun and for business. As a fair guess at least fifty percent of the exhibitors were showing business programs for the ST. Most of the fair was ST, a little more ST and then some more ST just to top it off. While the majority of the exhibitors had business packages to show, the majority of the attendees had music, graphics and games as the prime interest. Indeed there was some very good demos of the ST's ability to interact with musicians.

But the fair did have te 8-bits also. In fact Atari announced their latest innovation in the 8-bit line - the ATARI 800XE. Yes that's right they took the 130XE stripped 64K of memory from it; went back part way to the old nomenclature system and introduced the 800XE. Talk about progess they even had the new XC 12 Program Recorder that "doesn't need special cassettes anymore" you can use C30 to C90 cassettes. (To be a little fair to Atari, I should say that there is a much larger use of the cassette recorders in Europe than there is in the US.)

One of the busiest spots at the fair was the A.C.T.e.V. booth. ACT is an Atari User's group that attends fairs such as this and markets their Public Domain libraries for both the 8 and 16 bit machines. They had machines set-up that on which demos of the software were running. From what I could see most of the PD library came from the US. This seems to be a good idea for a library as large as the JACG's especially for the number of fairs that are held in the Metro area.

An interesting piece of equipment that I saw and purchased is a "MICRO-HANDLER - Multi-Function Joystick". In reality a joystick and a pair of paddles in one package that I'll be reviewing in an article soon.

I just couldn't write this article without mentioning the big push that Atari is also giving to their Video Game System. The largest brochure that the Atari Corp. booth was passing out was for the 2600 game system. Progress comes in several strange packages I guess but it is nice to see Atari taking the lead in doing their own marketing, maybe they'll even start doing the same in the States.

P.S. If any one is interested I have sent some of the literature (in German of course) to Gary Gorski. If you ask him nice he might let you look at it.

QUESTIONS/PROBLEMS/ANSWERS
(Taped at October meeting for
November, 1987 Newsletter)

"Anyone have a Prism driver for ST that runs DEGAS files on Prism or Quadrum Printer?"

No one at meeting responded affirmatively.

"I mistakenly typed LIST instead of LOAD 'D1:Filespec'. Disk directory has File Name but nothing shows when I LOAD or RUN it."

LIST acted as SAVE so computer sent what it contained to over-write the Disk File. If computer had nothing then Disk File contains blankness. You might experiment with DISKEY Program to recover old program but DISKEY is difficult and not a guarantee. Make back-up copy before experimenting to protect other programs on original disk.

"Does anyone use AWARD WARE Program? I have problems with printouts."

Several members answered and helped solve the problems. One member used PANASONIC Option instead of EPSOM Option. (It worked!).

"I want to run ST 16-bit programs on my 8-bit computer."

It cannot be done directly because each has a different computer chip However, if program is written in BASIC try rewriting it, with alterations for your 8-bit. Note: Large programs cannot be run on small computers, IE: 16K into 8K RAM, unless you have expanded memory.

"Using ATARI WRITER PLUS with Kosher printer on Bole, I lose margins and get the prompt, "ENTER MATERIAL" which is not explained in manual."

No members present could help. It was suggested a letter be sent to printer company.

"I cannot RUN old Atari programs on my 8-bit computer."

You need a Translator.

"What is a Translator?"

It is a program that adapts old Atari machine language into new, up-dated models. When booting up, insert Translator into disk drive then follow instructions. Copies of Translator are available from our library at monthly meetings.

Joseph E. Hicswa
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Passaic, New Jersey
07055
(201) 472-5190

My How Time Flies

Joe Kennedy - JACG

September 13 and I'm writing for the JACG newsletter again. It doesn't seem like I've been gone from Jersey for as long as I have. But don't let that title fool you. This isn't a reminiscence over the last several months but rather a product review. Hold it!! I know what you're thinking - "Kennedy's in Germany and we still have to hear why he bought his computer. Can there possibly be a reason left?" Well this isn't that type of product. I'm going to talk about the Microstuffer printer buffer from Supra Corporation. And you can be sure that I didn't buy my computer just to buy a printer buffer.

The Microstuffer (instead of MS we'll use the acronym MPB so that nobody gets confused with another source of computerware) is quite easy to set-up. You simply plug the transformer into the power line. Then unplug your Centronics-standard parallel printer cable from your printer. Plug it into your MPB and plug the cable from the MPB into your printer. When you turn on the MPB it runs a self-diagnosis to make sure everything is okay. he test status is indicated by the LEDs on the unit. During the test they remain on. After the test the REPEAT and FULL LEDs go out. If they begin blinking at the end of the test, you have what the manual calls a major malfunction that should be returned to Supra for service.

Okay, you're all set up. The diagnostic test is completed and the LEDs are out. So it's time to print something. The most use will be as you work with your word processor. As you print out a file you will be working on your next article for the newsletter. (After all you'll need something to fill the time you used to spend waiting to get your computer back from your printer.) When you send an article to the printer, it will go via the MPB. As the MPB receives the data the Full LED begins to flashes. The rate of the flash indicates the relative amount of data stored in the buffer - the faster it flashes the more memory stored. If the amount of information you send is more than 64K then the Full LED will remain on constantly and the Repeat LED will begin to flash. You information continues to go to the printer but you can no longer repeat it from the MPB.

How fast is the MPB? Well to print this article up to this point with my Panasonic KX-P1090 took 49.7 seconds however within 12.1 seconds I had my computer back to continue working on this article. Now that doesn't seem like much but think about it if you had 5 or 6 or more pages to print. This article up to that point printed up on about three-fourths of a page. And you can reprint the article again and again simply by pushing the repeat button on the MPB. You don't need to use your ccmputer to continue to make reprints of the same item. However you must be careful of one thing - the MPB is not smart. You must tell it when an article is over and you don't want to print it again by pushing the Clear button. This does as the name implies and clears the memory of all data. If you don't push the Clear button and then want to repeat the second (or third or whatever article) you can but you will also get repeats of all previous items that you sent to the buffer before you pressed the Clear button. So press that Clear button if you're don't with an item.

Great! But what else can I do with it? Well the other day I printed out a disk library list of Public Domain files that was eight pages long and I had my computer back before the first page was done. With the Print Shop I found that the MPB will not hold the entire card but that it will allow you to go back to the program before the second half of the card is half done. A good time saver but it still doesn't allow you to print multiple cards. (Why doesn't someone write a PD patch to Print Shop that would allow you to save cards to a file for reprinting or altering at a later date?)

By the way I hope we still have you ST users still reading at this point because this MPB's for you. Yes this is not an Atari 8-bit exclusive product but rather one that will work on all computers as long as they have the Centronics parallel printer connection. (The connection doesn't have to be in your computer. Mine comes from a U-Print interface.) No, as I said earlier I didn't buy my computer so that I could buy the Microstuffer Printer Buffer. But I did buy the MPB so that I would have more time to use my computer doing the times that I did buy it to do!

Letter to the JACG

from Joe Kennedy - JACG

Hello everybody! As you might have noticed from an article on the printer buffer I've got my system set-up in our house now and I'll be trying to write regularly for the newsletter and generally keeping touch as one can. Where possible I'll send along Atari news from Europe. If everything works out right, by the time you read this I will have attended a big Atari fair in Duesseldorf and I'll be able to report on it to you.

The purpose of this short note is to let you know that you can reach me at the following address:

Joe Kennedy
Hoechster Str. 2
D-4370 Marl
West Germany

I would enjoy hearing from you. Also now that we are settled in the house, if any of you are visiting Europe and Germany in particular let me know and we'll see if we can get together. Well farewell for now!

WHAT IS ACK AND NAK?

Donald Forbes - JACG

How do people communicate? They use words made from letters of the alphabet, as anyone who has ever watched Wheel of Fortune can tell you.

Where did the letters come from. Well, originally people used to draw pictures, as the Egyptians did (and the Chinese still do today). The Egyptian drawings were eventually replaced by the Greek alphabet (and then forgotten for almost two thousand years), and, when the Romans conquered the known world, by the Roman alphabet, which has been in use by the civilized world for some two millenia.

How do computers communicate? They too use "words" constructed from an alphabet. Computers are stupid: they can only distinguish between zero and one (Is the light on or off? Is the voltage on or off? Or is the bell ringing or silent?). Therefore, computers must talk in a language they can understand such as 00000000 or 11111111. These eight "bits" can be assembled into a code to create 256 different characters, or two to the eighth power.

The official language of most computers, and by far the most important character set to the English-speaking world, is the American Standard Code for Information Interchange, which you and I know as ASCII (or ASS-key). The code is the product of the American National Standards Institute (ANSI), where the code is referred to as ANSI Standard X3.4-1977 (Revised 1983), Code for Information Interchange.

The eight-bit code gives 256 possible characters, but ASCII only defines the lower 128 (counting from 0 to 127). In other words, the leftmost (or Most Significant, or High Order) bit is ignored. Most computers use the higher 128 bits to generate a large series of graphics characters.

If humans can get by with a 26-character alphabet, why do computers need a 127-character alphabet? The answer is that computers actually use a set of four different alphabets.

The first alphabet, which uses characters 96 to 126, consists of the lower case letters. This alphabet can be recognized by the use of a "1" in the sixth of the seven bit positions -- where the bits are numbered from left to right like this 87654321. In other words, the lower case letters will always look like this -- 0*1* **** -- where the asterisks stand for "wild cards."

The second alphabet, which uses characters from 64 to 95, consists of the upper case (or capital)

letters. If you take a lower case letter and change the bit pattern from 0*1* **** to 0*0* **** then you will get the corresponding upper case letter.

The third alphabet uses characters number 32 thru 63 and consists of the ten decimal digits as well special characters including all the punctuation marks. The eight-bit pattern for these characters always begins with 001 and therefore looks like this -- 001* ****.

You would think these three alphabets would be enough for computers to communicate. That is true, if computers only had to talk to people. But computers have to talk to computers, and that is where the fourth alphabet comes in.

The fourth alphabet is unlike all the other three alphabets (and the graphics characters created by using all eight bits). The fourth alphabet consists, not of graphic or printable characters, but of control or UNPRINTABLE characters.

The fourth alphabet is actually a five-bit alphabet because the first three of the eight bits are not used. All characters begin with 000 like this -- 000* **** -- which in effect is a five-bit code. The alphabet consists of 32 characters, from character 0 to character 31.

You may be familiar with character number 27, the ESCAPE character. You probably used it many times if you ever wrote a program in Atari BASIC, or you if you tried to do emphasized print on your ATARIWRITER.

You may wonder how these unprintable characters can ever get into the computer if they are unprintable and are not shown on the keyboard. There is a trick to it.

Here is the trick. The keyboard (like the typewriter keyboard) has been deceiving you for years. The keys are all marked with capital letters, but if you just press a key you don't get CAPITAL letters, you get a lower case letter. If you want a capital letter, you have to press the SHIFT key. The SHIFT key converts the lower case letters into capital letters by stripping out bit number six, as we mentioned, and converting this bit pattern -- 0*1* **** -- into this bit pattern -- 0*0* ****. The shift key shifts from one alphabet to another by stripping the single bit.

To get the control characters you perform the same simple trick: just strip off the three leading bits so that any eight-bit string becomes 000* ****. And how do you strip off these bits? You merely press the CONTROL key. You can get most of these control characters by pressing CONTROL A through CONTROL Z. Several word processors use this scheme to embed control characters in their text.

What do the characters in this fourth alphabet actually do? There should be only 32 of them, but actually there are 33 (because character 127 or DEL is also included in the set). Here is the breakdown of these 33 characters:

10 Logical communications control:
SOH STX ETX EOT ENQ
ACK DLE NAK SYN ETB
6 Format effectors: BS HT LF VT FF CR
5 Device control: BEL DC1 DC2 DC3 DC4
5 Physical communications control:
NUL CAN EM SUB DEL
4 Information separators: FS GS RS US
3 Alternate character set: SO SI ESC

The format effectors are probably the ones you will recognize immediately:

BS or backspace
HT or horizontal tab
LF or linefeed
VT or vertical tab
FF or form feed
CR or carriage return

The physical control characters include the bell ("Does Quasimodo ring a bell?") and four unassigned characters:

BEL or terminal bell or signal
DC1 DC2 DC3 and DC4 (DC1 and DC3 are generally used for communications flow control.)

The information separators are designed to impart hierarchical order to data. They are not often used, but some computerized typesetting systems use these codes to delimit indentation levels and type face changes associated with different headings:

FS or file separator
GS or group separator
RS or record separator
US or unit separator

Alternate characters sets are invoked with the ESC or escape character, and the SI (or shift in) and the SO (shift out) characters.

There are five physical communications control characters:

NUL is a time-waster to give a hardware device time to perform some function.
DEL is used to delete a wrong character.
CAN or cancel is used to ignore an agreed-upon number of previous characters.
EM or end of medium says the previous character

3

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There are two easy ways to renew:

1. Fill out a membership renewal form in the front lobby before our monthly meeting and present it with $25 (in cash or check) to the Treasurer. Add $6 for first class mailing of the Newsletter.

2. Copy the information on your mailing label and send, with your remittance to the address listed above.

CHECK YOUR LABEL TODAY! ! !

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